

THIS WEEK

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Pipes and drums

The US president's approval of a controversial oil pipeline offers a disturbing glimpse of the future. But he will struggle to get things all his own way.

President Donald Trump last week issued a permit for the Keystone XL pipeline, reversing the decision of his predecessor and fulfilling his own campaign promise. If built, Keystone would enable oil to be shipped from the Canadian tar sands to refineries along the US Gulf of Mexico. *Nature* has argued previously that the Keystone decision is more symbolic than significant: broader economic and political forces will ultimately determine how much and what kind of oil the world will burn in the coming decades. From this perspective, the US government's position on Keystone is most significant as a sure and unsettling sign of how the political winds are blowing.

Former president Barack Obama rejected the pipeline on moral grounds, saying that it would undermine US leadership on global warming, and there is some truth to this. The executive office has broad authority to determine whether Keystone — a major investment in fossil-fuel infrastructure when the world is trying to reduce greenhouse-gas emissions — is in the “national interest”. Obama said no. Trump, focused instead on short-term jobs and the fossil-fuel industry at large, said yes.

Trump may have breathed life into the project, but its future remains uncertain. The drop in global oil prices has reduced the short-term profitability of the tar sands, and the long term is even murkier, given the global trend towards low-carbon energy. Some energy giants are losing interest in tar sands, and the Keystone pipeline's developer, TransCanada, will face innumerable challenges from environmentalists as it seeks to push the project forward in the coming years. In the same way that Obama ultimately could not guarantee that the pipeline would not be built, Trump cannot guarantee that it will be.

Keystone is just one small piece of the energy agenda, and the reality is that Trump's singular focus on fossil fuels is at odds with economic and political realities. Renewable energies such as solar and wind are on the rise in the United States and abroad, and are now attracting more investment than fossil fuels. Coal's US decline is likely to continue regardless of Trump's promises, because the fuel is losing out to cheap natural gas, falling prices for renewables, and air-quality regulations that would be exceedingly hard to dismantle.

And then there's the 2015 Paris climate agreement, which Trump has pledged both to cancel and to consider with an open mind. His secretary of state, former ExxonMobil chief Rex Tillerson, believes that the United States should remain engaged. This might be an indication that walking away from the Paris process would be difficult, given the international diplomatic backlash that would surely ensue, but the Trump administration could still wreak plenty of havoc.

The US stance is hard to predict, but one glimpse came last week from Republican representative Kevin Cramer of North Dakota, who advised Trump on energy issues during the campaign. Cramer has been seeking co-signatories for a letter to Trump that lays out conditions if the United States is to remain party to the accord. Most importantly, the letter says that the country should withdraw its current commitment — to cut

emissions to at least 26% below 2005 levels by 2025 — and issue a new pledge that protects fossil-fuel interests and US industry.

Cramer's letter highlights the role of innovation, which is important. Unfortunately, the sole focus is on technologies that could make fossil fuels cleaner, such as carbon capture and sequestration. The United States is, of course, welcome to advance climate-friendly technologies for fossil fuels, and the world would certainly benefit if it succeeded.

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However, this would mean investing in climate-related research and development as well as crafting economic policies that reward the fruits of such labours. A few brave Republicans are beginning to talk about climate solutions, but Cramer's party as a whole won't even acknowledge that there is a problem to solve.

The irony is that the United States was the lead proponent of the Paris framework, which is essentially a collection of voluntary pledges. As a result, it could be hard for the Trump administration to push its agenda onto other countries. However, Trump can certainly stall progress at home. This is bad news for the world, but even worse news for the United States, which risks losing its economic and political influence on global affairs. Other countries, after all, can and must press forward. ■

DNA justice

Germany is considering proposals to extend the use of DNA evidence in criminal cases.

Behind closed doors this week, the German federal justice ministry has been discussing whether to hand police a powerful new tool involving the analysis of DNA samples. The debate is a direct consequence of the rape and murder of a medical student in Freiburg last October.

Two months later the crime became a cause célèbre: the police arrested and charged a young refugee from Afghanistan — and public fears over the million or so refugees who have arrived in Germany in the past few years erupted. Among the political responses, Freiburg's home state of Baden-Württemberg proposed new legislation to the federal parliament to extend the ways in which police can use genetic analysis.

Wider use of genetic analysis is something that German police and forensic scientists have long wanted. Yet it is unfortunate that in a country with some 1,600 murders every year, it had to be one involving a refugee that finally sparked the proposal. And it would be more